### **CURRICULUM VITAE - DAVID T. SCHRIER**

Principal Geotechnical Engineer

## **Current Address**

COTTON, SHIRES AND ASSOCIATES, INC. 646 University Avenue Los Gatos, California 95032 Phone: (408) 354-5542

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## Registration

Registered Geotechnical Engineer in California, No. 2334 Registered Professional Civil Engineer in California, No. 47816

### **Education**

M.S., Civil Engineering: Stanford University, Stanford, California, 1986 B.S., Applied Earth Science: Stanford University, Stanford, California, 1985

# **Professional History**

Principal Geotechnical Engineer, 2006 - present; Cotton, Shires & Associates, Inc., Los Gatos, California. Senior Geotechnical Engineer, 1996 - 2006; Cotton, Shires & Associates, Inc., Los Gatos, California. Project Geotechnical Engineer, 1990 - 1996; Harlan Tait Associates, Inc., San Francisco, California. Assistant Professor of Civil Engineering, 1988 - 1990; University of Los Andes, Bogota, Colombia. Staff Geotechnical Engineer, 1986-1988; Harlan Miller Tait Associates, Inc., San Francisco, California.

#### Representative Experience

Mr. Schrier has over 37 years of professional experience in the field of geotechnical engineering. Recently he has worked on several dams in California, including Bear Gulch Dam in Atherton, Sand Bar Dam in Tuolumne County, Tiger Creek Regulator Dam in Amador County, and Lake Fordyce Dam in Nevada County, California. Mr. Schrier is presently the Principal Engineer for seismic stability analysis of the Bear Gulch Dam. The previous investigation and analysis included measuring shear wave velocity by downhole suspension PS velocity measurements, analyzing the static and seismic slope stability, developing site-specific rock motions, analyzing seismic displacements, evaluating alternative mitigations measures to improve the seismic stability and increase the permitted operating reservoir pool elevation, investigating alternative borrow sites, and designing a filter. CSA also investigated the downstream portion of the dam to evaluate thickness of fill, alluvium and colluvium overlying bedrock in the proposed buttress footprint. Presently, CSA is completing a summary report of the seismic stability and deformation analyses. Bear Gulch Dam is equipped with three slope inclinometers, five standpipe piezometers, two sets of three vibrating wire piezometers with data loggers, and an array of survey monuments across the crest. The piezometers are read weekly by the owner and reviewed by CSA. CSA undertakes an annual monitoring

of the slope inclinometers and survey monuments, and prepares an annual monitoring report that is submitted to DSOD.

Mr. Schrier was also Cotton, Shires and Associates, Inc. (CSA) principal engineer for various creek channel projects including the investigation for a fishway and screened intake in Woodside, California, the investigation and design for bank stabilization projects in Palo Alto and Woodside, and the investigation for a creek bank stabilization project in Gilroy, California. The Palo Alto project was recently completed, and consists of 18, 50-foot deep shear pins and 17, 150-kip tiebacks.

Recently Mr. Schrier has acted as the Principal Engineer for the investigation and design of various slope stabilization projects in northern California. The projects have included soldier pile and wood lagging retaining walls, geogrid reinforced earth slopes, and shear pin walls.

Mr. Schrier is also presently working on the investigation for a 650-foot long seawall in Pacifica, California. Mr. Schrier is also currently preparing design drawings for the stabilization of the roadway in Saratoga California that is being impacted by a landslide. The stabilization design includes a 290-foot long retaining wall consisting of 49, 3-foot diameter piers, a tiebeam and 47 tiebacks.

Between 2008 and 2012, Mr. Schrier was the Principal Engineer for a large landslide investigation and stabilization project in Santa Barbara, California. The stabilization design consisted of multiple rows of large diameter shear pins, high tension tiebacks, grading, retaining walls and subdrains. The stabilized landslide was equipped with 48 slope inclinometers, 39 vibrating wire piezometers, 43 load cells, and 9 strain gauges. He has also been involved in the investigation of several large water storage tanks in San Mateo and Woodside, California. Mr. Schrier has also acted as the Principal Geotechnical Engineer for the investigation, monitoring (with slope inclinometers), design, plan and specification preparation, and construction observation and testing for the stabilization of slopes affecting roads in the communities of Saratoga, South San Francisco, San Bruno, and Woodside. Mr. Schrier has also assisted in geotechnical peer reviews by evaluating foundations design, liquefaction analysis and mitigation and hillside stabilization plans for San Francisco Bay Area communities.

Mr. Schrier has participated in the geotechnical investigation of over 30 large municipal water storage tanks. He also acts as the Principal Geotechnical Engineer for the investigation of new and rehabilitated sewer pipelines.

As a Principal Geotechnical Engineer, Mr. Schrier regularly performs geotechnical engineering analysis, prepares reports, designs, plans and specifications. His experience in engineering analysis for landslide related projects include: analyzing laboratory data, determining static and seismic slope stability, and determining seismic displacement magnitudes. Mr. Schrier has designed retaining walls, buttress repairs, and drainage mitigation measures. Mr. Schrier has extensive experience working with AutoCAD.

His areas of expertise include:

- Slope stability;
- Construction observation and testing;
- Liquefaction analysis;
- Design of repairs and mitigation measures for failed slopes.
- Grading design and practice;
- Seepage through dams;
- Deformation analysis;